

What is claimed is:

1. A complex drug delivery composition for treating cancer comprising at least two of the following components:
 - 5 a) a suppressor of antiapoptotic cellular defense,
 - b) an anticancer agent,
 - c) a cell-surface targeting moiety, or
 - d) a multifunctional carrier.
- 10 2. The composition of claim 1, wherein the suppressor of antiapoptotic cellular defense, anticancer agent, cell-surface targeting moiety, and multifunctional carrier are operably-linked by a scaffold.
- 15 3. The composition of claim 1, wherein the multifunctional carrier and cell-surface targeting moiety are the same molecule.
4. A method for treating cancer comprising administering
20 an effective amount of a composition of claim 1 so that the signs or symptoms of cancer are reduced.
5. A method of producing a complex drug delivery composition comprising providing a scaffold and
25 combining the scaffold with the composition of claim 1 so that a complex drug delivery system is produced.
6. The method of claim 5 wherein the composition comprises at least one molecule of the component.
- 30 7. The composition of claim 5, wherein the multifunctional carrier and cell-surface targeting moiety are the same molecule.